

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P564921

Luminaire Tested: **SQ4-PW1-100U-050D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564921
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15498.4 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

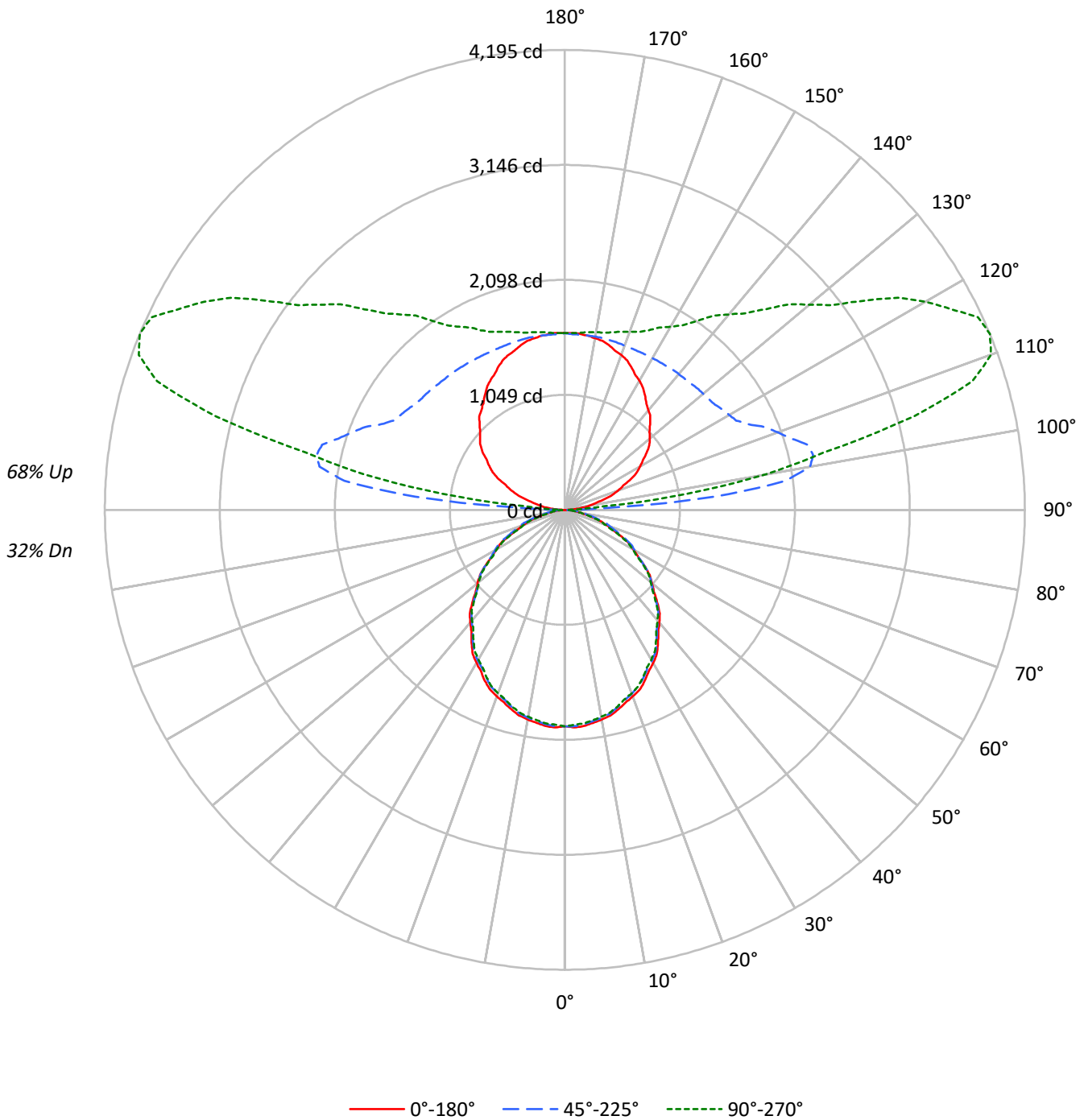
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6075	6075	6075
5°	6114	6066	6039
10°	6065	6016	5984
15°	6001	5935	5912
20°	5929	5838	5827
25°	5847	5740	5723
30°	5723	5636	5599
35°	5561	5482	5449
40°	5387	5303	5282
45°	5177	5110	5086
50°	4963	4921	4888
55°	4731	4731	4657
60°	4443	4528	4368
65°	4066	4268	3964
70°	3583	3928	3490
75°	3061	3516	2978
80°	2373	2959	2405
85°	1535	2272	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	1.2
10°-20°	525.2	3.4
20°-30°	779.0	5.0
30°-40°	911.5	5.9
40°-50°	907.4	5.9
50°-60°	783.6	5.1
60°-70°	564.1	3.6
70°-80°	295.8	1.9
80°-90°	76.7	0.5
90°-100°	754.6	4.9
100°-110°	2083.1	13.4
110°-120°	2148.4	13.9
120°-130°	1726.4	11.1
130°-140°	1356.8	8.8
140°-150°	1040.6	6.7
150°-160°	747.9	4.8
160°-170°	457.3	3.0
170°-180°	154.2	1.0
0°-30°	1490.1	9.6
0°-40°	2401.6	15.5
0°-60°	4092.6	26.4
0°-90°	5029.1	32.4
90°-120°	4986.1	32.2
90°-150°	9109.9	58.8
90°-180°	10469.0	67.5
0°-180°	15498.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1981	1958	1965	1960	1956	188
15°	1885	1861	1864	1860	1857	531
25°	1723	1694	1692	1681	1686	792
35°	1481	1461	1460	1446	1452	926
45°	1190	1180	1175	1171	1170	918
55°	882	881	882	870	868	787
65°	559	576	586	564	545	554
75°	258	281	296	276	251	276
85°	44	57	64	61	57	58
90°	5	10	21	23	26	9
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.3	1975.3	1975.3	1975.3	1975.3
2.5°	1986.5	1970.1	1975.3	1971.0	1961.4
5°	1980.6	1958.4	1964.9	1959.6	1956.2
7.5°	1960.4	1940.0	1944.7	1939.1	1937.1
10°	1942.3	1921.9	1926.6	1919.6	1916.2
12.5°	1921.4	1899.6	1904.3	1897.3	1895.3
15°	1884.8	1861.0	1864.0	1860.4	1857.0
17.5°	1842.4	1818.2	1818.7	1813.1	1812.4
20°	1811.7	1786.2	1783.9	1777.0	1780.4
22.5°	1778.3	1751.4	1749.1	1739.5	1744.2
25°	1723.0	1694.1	1691.7	1681.3	1686.4
27.5°	1658.9	1630.4	1630.4	1615.9	1621.3
30°	1611.6	1584.4	1587.2	1570.0	1576.8
32.5°	1561.5	1537.0	1538.5	1521.3	1528.1
35°	1481.1	1460.7	1460.2	1446.4	1451.5
37.5°	1398.9	1380.9	1378.0	1370.1	1371.4
40°	1341.8	1326.5	1321.0	1315.7	1315.7
42.5°	1282.0	1268.0	1262.5	1258.6	1257.3
45°	1190.4	1180.2	1174.8	1171.2	1169.5
47.5°	1099.9	1090.4	1085.7	1083.2	1081.5
50°	1037.3	1030.5	1028.6	1023.3	1021.6
52.5°	974.6	970.5	968.7	962.0	960.3
55°	882.4	880.7	882.4	870.2	868.5
57.5°	786.3	789.0	794.7	778.2	774.1
60°	722.3	729.1	736.2	716.9	710.1
62.5°	656.8	667.7	677.7	655.6	646.0
65°	558.7	575.7	586.5	563.5	544.7
67.5°	464.0	485.1	498.1	473.3	452.2
70°	398.5	422.4	436.8	411.9	388.1
72.5°	341.5	368.0	379.8	356.2	332.4
75°	257.6	281.4	295.9	276.1	250.6
77.5°	182.7	205.2	217.2	200.0	178.9
80°	134.0	157.8	167.1	152.8	135.8
82.5°	95.0	114.8	121.1	112.5	100.9
85°	43.5	57.1	64.4	60.8	57.4
87.5°	12.2	22.7	30.6	31.1	33.0
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)